IN THE CLAIMS:

Please amend the claims as follows:

1. (**Currently Amended**) A method for controlling ~~the~~ a final thickness of a rolled product at ~~the~~ an outlet of a rolling mill including at least two roll stands operating in tandem and each roll stand determining a portion of ~~the~~ a global reduction in thickness to be carried out, by running the rolled product between two working rolls, each roll stand being associated with means for applying an adjustable clamping load between the working rolls and driving means for applying, to the working rolls, a rotational driving torque at an adjustable speed, the ~~plant~~ rolling mill being associated with a ~~general~~ speed control system of the ~~different~~ at least two roll stands determining a gradual increase in ~~the~~ a rotational speed of the working rolls in relation to ~~the~~ a gradual variation in thickness from one roll stand to the next, and to a control device for controlling ~~the~~ a reduction in thickness and in tension of the rolled product in each space between two successive roll stands, ~~characterised in that~~ wherein the control device performs, in real time, dynamic balance, between ~~the~~ different roll stands, of the torques applied, in each roll stand, on the working rolls without any noticeable disturbance of the final thickness **[[h_5]]** of the rolled product at the outlet of the rolling mill ~~plant~~.

2. (**Currently Amended**) **[[A]]** The method according to claim 1, ~~characterised in that~~ wherein the control device controls a variation in the rolling speed in at least one of the roll stands and modifies consequently ~~the~~ a distribution of the reduction in thickness and ~~the~~ a gradation of the speeds between the different roll stands ~~in order~~ to distribute substantially equally over the driving means ~~assembly the~~ a

load to be applied for driving the rolled product at a given speed at ~~the~~ an outlet of the ~~plant~~ rolling mill while maintaining the final thickness **[[h_5]]** at a set speed.

3. (**Currently Amended**) **[[A]]** The method according to one of the claims 1 and 2, wherein ~~the~~ a global reduction in thickness to be performed between ~~the~~ an inlet and ~~the~~ an outlet of the ~~plant~~ rolling mill is distributed, according to a rolling pattern, using a pre-adjustment system determining the reduction in thickness to be performed by each roll stand and correlative gradation of the rotational speeds of the working rolls, ~~characterised in that permanently the~~ wherein a load is permanently ~~load~~ imposed, in each roll stand, to ~~the~~ rotational driving means of the working rolls for obtaining ~~the~~ a speed set by the rolling pattern is detected and the reduction in thickness allocated to ~~the~~ a most loaded roll stand is decreased in order to provide dynamic balance of the loads applied on the different roll stands.

4. (**Currently Amended**) **[[A]]** The method according to claim 3, ~~characterised in that,~~ wherein to decrease the reduction in thickness allocated to the most loaded roll stand, the rotational speed of the working rolls of ~~said~~ the most loaded roll stand is diminished with respect to the speed set by the rolling pattern.

5. (**Currently Amended**) **[[A]]** The method according to claim 4, wherein the speed reduction of the most loaded roll stand determines an automatic reduction in speed of the rolled product at the inlet of ~~the~~ a following roll stand which generates a potential thickness defect at the outlet of the ~~plant~~ rolling mill during a transient period of product infeed in ~~the~~ an inter-stand space, ~~characterised in that this~~ wherein the potential thickness defect is compensated for ~~by anticipation~~ by controlling a reverse variation of the speed of all of the roll stands situated upstream of ~~said~~ the most loaded

roll stand, liable to decrease the reduction in thickness performed in ~~said~~ the upstream roll stands~~, in order~~ to perform a load transfer on the roll stands placed downstream of ~~said~~ the most loaded roll stand.

6. (**Currently Amended**) **[[A]]** The method according to claim 3, ~~characterised in that~~ wherein to decrease the reduction in thickness to be performed by the most loaded roll stand, the rolling speed is increased in the previous roll stand situated immediately upstream~~, in order~~ to decrease the thickness of the rolled product before arriving ~~in~~ at the most loaded roll stand.

7. (**Currently Amended**) **[[A]]** The method according to claim 6, wherein the increase in speed in the previous roll stand determines an automatic increase in the speed of the rolled product at the inlet in the most loaded roll stand which generates a potential thickness defect at the outlet of the ~~plant~~ rolling mill during a transient period of product infeed of the previous roll stand at the most loaded roll stand, ~~characterised in that this~~ and wherein the potential thickness defect is compensated for by anticipation while controlling an increase in the rolling speed in at least one roll stand situated ~~still~~ upstream of ~~said~~ the previous roll stand~~, in order~~ to perform a load transfer on all the roll stands placed upstream of the most loaded roll stand, while increasing the reduction in thickness performed in each roll stand ~~thereof~~.

8. (**Currently Amended**) **[[A]]** The method according to claim 5, ~~characterised in that~~ wherein the variation in thickness of the rolled product is constantly monitored ~~permanently as it progresses~~ while progressing from the first roll stand to the last roll stand of the ~~plant, in order~~ rolling mill to control a variation in speed of certain roll stands liable to compensate for a potential thickness defect for a transient period

corresponding to ~~the~~ a time necessary beforehand between two successive roll stands, respectively upstream and downstream, of the variation in thickness resulting from a variation in speed of the upstream roll stand~~, in order~~ to permanently hold constant~~, permanently,~~ the final thickness **[[h_5]]** of the rolled product at the outlet of the last roll stand of the rolling mill ~~plant~~.

9. (**Currently Amended**) **[[A]]** The method according to claim 8, ~~characterised in that~~ wherein after detection of the most loaded roll stand, ~~the~~ any variations in speed are combined on both sets of roll stands situated respectively upstream and downstream of the most loaded roll stand while producing a load transfer towards certain roll stands of ~~said~~ the upstream and downstream sets according to the detected load ~~detected, in order~~ to balance ~~the~~ loads on all the roll stands of the rolling mill ~~plant~~, while holding constant the final thickness **[[h_5]]** of the rolled product at the outlet thereof.

10. (**Currently Amended**) **[[A]]** The method according to claim 1, ~~characterised in that,~~ wherein after performing dynamic balance of the loads applied on all the roll stands, the rolling speed in one of the roll stands is increased and the control system consequently causes ~~consequently~~ the speeds of the other roll stands to vary ~~in order~~ to increase the speed of the rolled product ~~(B)~~ at the outlet of the ~~plant~~ rolling mill without disturbing the final thickness and while preserving dynamic balance between all the roll stands.

11. (**Currently Amended**) **[[A]]** The method according to claim 10, ~~characterised in that the~~ wherein an increase in ~~the~~ an overall speed of the rolling mill

~~plant~~ represents a gain of up to 15 % of ~~the~~ a maximum speed obtained without ~~the~~ dynamic balance of ~~the~~ applied rolling torques ~~applied~~.

12. (**Currently Amended**) **[[A]]** The method according to claim 1, wherein the driving means of the working rolls are electric motors, ~~characterised in that~~ and wherein the control system performs dynamic balance of the currents**[[,]]** without exceeding a rated intensity in each motor.

13. (**Currently Amended**) A device for controlling ~~the~~ a final thickness **[[h_5]]** of a rolled product in a tandem rolling mill including at least two roll stands spaced apart from one another, and each roll stand determining ~~each~~ a portion of ~~the~~ a reduction in thickness, each roll stand including at least two working rolls delineating a gap for letting through the rolled product, means for applying an adjustable clamping load between said working rolls and motorised means for driving said working rolls into rotation at an adjustable speed, the ~~plant~~ rolling mill being associated with a ~~general~~ speed control system of the ~~different~~ at least two roll stands determining a gradual increase in ~~the~~ a rotational speed of the working rolls in relation to ~~the~~ a gradual variation in thickness of a roll stand (i) at ~~the~~ a next roll stand (i+1), and to a control device for controlling ~~the~~ a reduction in thickness and in tension of the rolled product in each space between two successive roll stands, wherein the control device includes a closed-loop circuit for dynamic balancing, between ~~the~~ different roll stands, of the torques applied by the motorised means of each roll stand ~~in order~~ to obtain the final thickness desired **[[h_5]]** and to maintain the latter at a substantially constant value.

14. (**Currently Amended**) **[[A]]** The device according to claim 13, for controlling the final thickness **[[h_5]]** of the rolled product at the outlet of ~~a~~ the rolling mill

wherein the overall speed control system is associated with a pre-adjustment system of the reduction in thickness allocated to each roll stand, determining, for each roll stand, a speed setpoint to be applied to the motorised means for gradual increase in speed corresponding to the variation in thickness from one roll stand to the next, ~~characterised in that~~ wherein the dynamic balancing circuit includes means for correcting, on each roll stand, the speed setpoint determined by the pre-adjustment system ~~in order~~ to modify ~~the~~ a distribution of the reduction in thickness between the different roll stands.

15. **(Currently Amended)** **[[A]]** The control device according to claim 14, ~~characterised in that~~ wherein the dynamic balancing circuit includes a module for controlling ~~the~~ transients acting as a closed-loop on the driving means of the working rolls, ~~in order~~ to provide by anticipation, an additional correction to the speed setpoint for a transient infeed period of the rolled product between a roll stand (i) whereof the speed setpoint has been corrected and the following roll stand (i+1).

16. **(Currently Amended)** **[[A]]** The control device according to claim 15, ~~characterised in that~~ wherein the module for controlling the transients is associated with means for permanent tracking of the variation in thickness of the rolled product when running between the inlet and the outlet of the rolling mill ~~plant~~, which determine ~~the~~ instants of ~~the~~ a beginning and of ~~the~~ an end of ~~the~~ a transient period during which an additional correction is made to the speed setpoint of at least one of the roll stands (i).

17. **(Currently Amended)** **[[A]]** The control device according to claim 16, ~~characterised in that~~ wherein the dynamic balancing circuit of ~~the~~ currents of ~~the~~ motors and ~~the~~ a module for controlling the transients have been designed with a final outlet

stage for controlling ~~the~~ variations in ~~the~~ speeds including a proportional, integral and differential controller.

18. (**Currently Amended**) A rolling mill including at least two roll stands operating in tandem, fitted with means for adjustable clamping of ~~the~~ working rolls and with electric means for driving said working rolls into rotation and including means for controlling ~~the~~ a thickness ~~of outlet~~ of ~~the~~ a rolled product at an outlet of the rolling mill and ~~the~~ tractions between the roll stands, a pre-adjustment system ~~of the~~ for adjusting a rate of reduction in thickness of each roll stand and a ~~general~~ speed control system ~~of~~ for all the roll stands, ~~characterised in that it~~ wherein the rolling mill also includes a device for dynamically balancing ~~the~~ currents of the driving motors of the roll stands operating as a closed-loop.

19. (**Currently Amended**) [[A]] The rolling mill according to claim 18, ~~characterised in that~~ wherein the device for balancing the currents of the driving motors includes means for correcting ~~the~~ a speed setpoint of at least one of ~~said~~ the motors, and wherein the speed setpoint is established by the pre-adjustment system.

20. (**Currently Amended**) [[A]] The method according to claim 7, ~~characterised in that~~ wherein the variation in thickness of the rolled product is constantly monitored ~~permanently as it progresses~~ while progressing from ~~the~~ a first roll stand to ~~the~~ a last roll stand of the rolling mill ~~plant, in order~~ to control a variation in speed of certain roll stands liable to compensate for a potential thickness defect for a transient period corresponding to ~~the~~ a time necessary beforehand between two successive roll stands, respectively upstream and downstream, of the variation in thickness resulting from a variation in speed of the upstream roll stand, ~~in order~~ to permanently hold

constant~~, permanently,~~ the thickness **[[h_5]]** of the rolled product at ~~the~~ an outlet of the last roll stand of the rolling mill ~~plant~~.

21. **(Currently Amended)** **[[A]]** The method according to claim 20, ~~characterised in that~~ wherein after detection of the most loaded roll stand, the variations in speed are combined on both sets of roll stands situated, respectively, upstream and downstream of the most loaded roll stand while producing a load transfer towards certain roll stands of ~~said~~ the upstream and downstream sets according to the detected load ~~detected, in order~~ to balance the loads on all the roll stands of the rolling mill ~~plant~~, while holding constant the final thickness **[[h_5]]** of the rolled product at the outlet thereof.